BRIEFER ARTICLES

NOTES ON TWO CALIFORNIA NEMOPHILAS

NEMOPHILA MENZIESII var. **annulata**, var. nov.—Plants slender, prostrate, very brittle: cotyledons with oval blade and slender petiole: leaves rather less divided than in *N. Menziesii*, mostly 5-lobed, the upper greatly reduced but showing less tendency to become entire than in the variety *integrifolia* Parish: peduncles usually twice or more exceeding the leaves, often flexuous: flowers usually about or rather less than 1^{cm} across; calyx-lobes obtuse; corolla pale blue to almost white, with a deep-purple irregular ring above the scales, seldom dotted or hairy toward the center within; scales from 0.2 to 1^{mm} long, attached by one whole side or free at the tip (seldom as much as half free), ciliate with stiff bristles, which are often as long or longer than the scale is wide.

This variety is distinguished from the type by the greatly reduced size, lighter color, and peculiar markings of the corolla; the fewer-lobed, smaller leaves; the oval cotyledons; and the more delicate habit. From the variety *integrifolia* it is distinguished by the smaller size and the markings of the corolla; the lack of hairs within the corolla; the somewhat longer peduncles; the rather more divided leaves; and especially bv the corolla scales (cf. note to *N. Menziesii integrifolia*, BOT. GAZETTE **34**:205. 1902).

This is the first Nemophila reported from the desert regions of California. It was found among rocks at Dead Man's Point, near Victorville, on the Mojave desert. The type collection is Hall and Chandler, no. 6769, and the type specimens are in the herbarium of the University of California.

NEMOPHILA MENZIESII var. **rotata** (Eastw.), comb. nov.—Very close to the variety *integrifolia* Parish, with which I united it in my Revision of the Genus Nemophila (BOT. GAZETTE **34**:194). The examination of more abundant material seems to justify the retention of the form as a separate variety. It differs from the variety *integrifolia* chiefly in the smaller flowers (usually less than 1^{cm} across), which are usually of much deeper blue and nearly or quite rotate. The sinuses of the corolla are comparatively deep and the lobes comparatively narrow. The scales are oblong-linear, deeply laciniate, and attached by the narrow base only. So far as seen, the corollas were not dotted toward the center, but were covered with long hairs at the base within.

The range of this variety seems to be restricted to the vicinity of San Diego, California, the plants of ORCUTT from Lower California cited by

Miss EASTWOOD in connection with the original description being probably *N. pedunculata* Dougl. This opinion was ventured in my revision, though at the time that was written the Lower California locality seemed to be far beyond the known range of *N. pedunculata*, which had not been found south of the Santa Inez Mts. Since then, however, I have found the species at Witch Creek, San Diego County, so that it may easily range into Lower California.—HARLEY P. CHANDLER.

BRANCHING SPORANGIOPHORES OF RHIZOPUS

(WITH ONE FIGURE)

Current texts agree in stating that the sporangiophore of *R. nigricans* bears a single sporangium. For example, SWINGLE states[1] that "each sporangiophore bears a single spherical sporangium." In a recent culture on bread, some two weeks old, two anomalous conditions were observed (*fig. 1*). In one case, by two successive branchings, one sporangiophore bore three normal sporangia. In the other case, by a single dichotomous branching, two sporangia were developed.—LEROY H. HARVEY, *Yankton College, Yankton, S. D.*

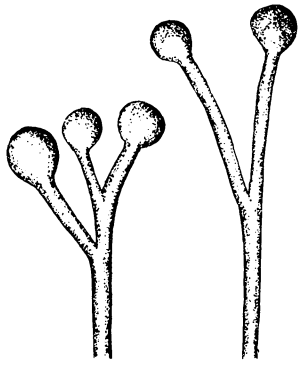

Fig. 1.—Branching sporangiophores of Rhizopus.

AN UNUSUAL METHOD OF VEGETATIVE REPRODUCTION IN *DIONAEA MUSCIPULA*

(WITH ONE FIGURE)

In 1892 I described and illustrated an abnormal development of the inflorescence of Dionaea.[2] Two years ago I found an exactly similar kind of growth in a number of plants which had been kept in pots on a shelf next to the glass of a greenhouse with a southern exposure. In the axils of the bracts were found short vegetative branches, each with a number of perfect fly-traps (*fig. 1*), which closed when any of the six hairs on their upper surface were touched twice in succession. The response, however, was of the most sluggish character. The plants, when full grown, were rather crowded together by the arrangement of the pots, and whether this

[1] Bureau Pl. Industry Bull. 37. 1903. p. 15.

[2] HARSHBERGER, JOHN W., An abnormal development of the inflorescence of Dionaea. Contrib. Bot. Lab. Univ. Penn. 1:45–49. *pls. 5, 6.* 1892.